

## ABSTRACT

Cell search method in an asynchronous mobile communication network suitable for reducing a hardware complexity and a power consumption of a mobile terminal by improving a cell search method suggested to ETSI(European Telecommunications Standards Institute) presently, method including the steps of (a1) the user device obtaining a slot synchronization for every slot assigned to the first and second synchronization channels using the first synchronization signal transmitted from the base station, and detecting a position of an omitted synchronization code when there is the omitted synchronization code from a plurality of synchronization codes in the first synchronization signal, (b1) searching for a starting point of each frame assigned to the first and second synchronization channels and one base station group the base station is in use by using the second synchronization signal, and (c1) the user device determining a code for identifying the base station among the second codes used by the base station group from a position of the detected synchronization code.